



Base modified from U.S. Geological Survey, 1957
Limited revision 1953
100,000-foot grids based on Idaho coordinate system
central and west zones

NATIONAL GEODETIC VERTICAL DATUM OF 1929
1995 MAGNETIC DECLINATION VARIES FOR THIS SHEET FROM 18°0' EASTERLY FOR THE CENTER OF THE WEST EDGE TO 16°0' FOR THE CENTER OF THE EAST EDGE. MEAN ANNUAL CHANGE IS 5' WESTERLY

RESOURCE POTENTIAL FOR CRETACEOUS MOLYBDENUM STOCKWORKS IN THE CHALLIS 1° × 2° QUADRANGLE, IDAHO

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EXPLANATION OF RESOURCE POTENTIAL
Area having resource potential for Cretaceous molybdenum stockworks—See table 24 for scoring of recognition criteria
High potential—Areas 5, 8
Moderate potential—Areas 2, 9, 11, 12, 14
Low potential—Areas 1, 3, 4, 6, 7, 10, 13

x9

- Mine or prospect
1 Virginia Beth
2 Cabin Creek
3 Thompson Creek
4 Baker
5 Little Boulder Creek
6 Boulder Chain Lakes
7 Big Boulder basin

LIST OF GEOLOGIC TERRANES

al	Alluvial terrace
pl	Eocene Plutonic terrane
vo	Challis volcanic terrane
ba	Idaho batholith terrane
bs	Black shale terrane
ca	Carbonate terrane
ms	Proterozoic terrane
	Trans-Challis fault system terrane
	Regions of overlap between carbonate terrane and black shale terrane
	Mostly rock glaciers; alluvial fans; landslide debris; talus; and terminal, end, and lateral moraines. Also includes Miocene volcanic and sedimentary rocks and noncarbonate roof pendants in the Idaho batholith of undivided (Paleozoic? or Proterozoic?) age
	Terrane boundary
	Boundaries of calderas and other volcano-tectonic structures—Dashed where approximately located

DEFINITIONS OF RESOURCE POTENTIAL

High mineral resource potential exists in areas where geologic, geochemical, and geophysical characteristics favorable for resource accumulation are known to be present, or where enough of these characteristics are present to give strong support to genetic models favorable for resource accumulation and where evidence shows that mineral concentration—mineralization in the broad sense—has taken place (Taylor and Steven, 1983, p. 1269).

Moderate mineral resource potential exists in areas where geologic, geochemical, and geophysical characteristics favorable for resource accumulation are known or can reasonably be inferred to be present but where evidence for mineralization is less clear or has not yet been found (Taylor and Steven, 1983, p. 1269).

Low mineral resource potential exists in areas where geologic, geochemical, and geophysical characteristics are unfavorable, where evidence indicates that mineral concentrations are low, or where requirements for generation of mineralization have not been met (Taylor and Steven, 1983, p. 1269).

Unknown mineral resource potential exists where the level of knowledge, at an appropriate scale, is so inadequate that to classify potential as high, moderate, or low would be misleading (Taylor and Steven, 1983, p. 1269).

In some instances an assignment of **no mineral resource potential** for a particular ore deposit type or types has been given to specific areas within the Challis quadrangle. In these cases the occurrence of the particular ore deposit type is dependent on the presence of a specific lithology. Known absence of the required rock type precludes the occurrence of the ore deposit.

